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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,920	09/12/2003	Paul B. Aamodt	P0011618.00	8344
27581	7590	06/18/2007	EXAMINER	
MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MINNEAPOLIS, MN 55432-9924			CREPEAU, JONATHAN	
		ART UNIT	PAPER NUMBER	
		1745		
		MAIL DATE		DELIVERY MODE
		06/18/2007		PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/661,920	AAMODT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jonathan S. Crepeau	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 06 June 2007.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-15 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 and 17-19 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 9, 2007 has been entered.

This Office action addresses claims 1-15 and 17-19. The claims are subject to new grounds of rejection under 35 USC 103 and the doctrine of obviousness type double patenting, as necessitated by amendment. This action is non-final.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-15 and 17 are rejected under 35 U.S.C. 103(a) as being obvious over Aamodt et al (U.S. Patent 6,805,719) in view of Fauteux et al (U.S. Patent 5,217,827) or Kejha et al (U.S. Pre-Grant Publication No. 2003/0027051).

Aamodt et al. teach an electrochemical cell comprising an electrode assembly having an anode comprising a first lithium segment (15) and a second lithium segment (10) (see Figure 2). The second segment is thicker than the first segment and forms the inner windings of the battery. The segments are directly joined to each other at an overlapping region (8). A current collector (5) which may take the form of a grid or screen is disposed on the outside surface of both segments and is coextensive with the second segment. The current collector may comprise Ti, Ni, Cu, or an alloy of Ni and Cu (col. 4, line 54). Both the anode and cathode assemblies may be enveloped in a separator material (see col. 5, line 21). The separator material also corresponds to the claimed "spacer" and "reinforcing" members.

However, Aamodt et al. do not expressly teach that the current collector is "solid" as recited in claim 1.

Fauteux is directed to an electrochemical cell. In column 2, line 1, the reference teaches a lithium metal electrode comprising a metal foil current collector.

Kejha et al. is directed to a method of making electrodes. In [0028] the reference teaches that the current collector may comprise "metal grids, or expanded foils, or perforated foils, or solid foils."

Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because either of the Fauteux or Kejha references

would motivate the artisan to use a solid current collector as the current collector of Aamodt et al. With regard to Fauteax, this reference teaches at col. 1, line 66 that “cathode and anode half elements useful in constructing the electrochemical cells of the present invention are known in the art. The most typical anode is the lithium anode prepared by providing a layer of lithium metal on a metal foil (such as nickel or copper) which functions as the current collector.”

Accordingly, the artisan would be motivated to use a metal foil as the current collector of Aamodt et al. since these are known in the art and commonly used as indicated by Fauteax.

Further, with regard to Kejha, as noted above, this reference teaches a variety of structures, including a solid foil, as being appropriate for use as a current collector member. The selection of a known material based on its suitability for its intended use has generally been held to be *prima facie* obvious (MPEP §2144.07). As such, it would be obvious to use a solid foil in as the current collector of Aamodt et al.

The Aamodt reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in

the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-15 and 17-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 and 10-19 of copending Application No. 10/661,909. Although the conflicting claims are not identical, they

are not patentably distinct from each other because the claims of the '909 application anticipate some of the instant claims and render the remaining claims obvious.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-15 and 17 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,805,719 in view of Fauteax et al. or Kejha et al. The claims of the '719 patent do not expressly recite a "solid" current collector as recited in the instant claims. However, as set forth in the above rejection, the disclosures of Fauteax et al. or Kejha et al. render obvious this limitation. As such, the instant claims are an obvious variant of the '719 patent claims.

*Allowable Subject Matter*

7. Claims 18 and 19 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and if the obviousness-type double patenting rejection was overcome.

8. The following is a statement of reasons for the indication of allowable subject matter:

Aamodt et al. do not teach or fairly suggest a reinforcing member comprising an alkali metal coupled to the overlapping region.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan, can be reached at (571) 272-1292. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*J.C.*  
Jonathan Crepeau  
Primary Examiner  
Art Unit 1745  
June 13, 2007